



PATENT APPLICATION

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re application of

Docket No: Q62474

Carlos PEDRIDO, et al.

Appln. No.: 09/745,414

Group Art Unit: 1731

Confirmation No.: 9890

Examiner: John M. HOFFMAN

Filed: December 26, 2000

For: PREFORM INLET ARRANGEMENT FOR AN OPTICAL FIBER DRAWING
FURNACE, A FURNACE PROVIDED WITH THAT KIND OF INLET
ARRANGEMENT, AND A PREFORM EQUIPPED TO CO-OPERATE WITH THAT
INLET ARRANGEMENT

REPLY BRIEF PURSUANT TO 37 C.F.R. § 1.193(b)

MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. § 1.193(b), Appellant respectfully submits
this Reply Brief in response to the Examiner's Answer dated January 29, 2004. Entry of this
Reply Brief is respectfully requested.

POINTS RAISED IN EXAMINER'S ANSWER

Appellant responds to certain points raised by the Examiner in the following subheadings
of the Examiner's Answer:

(3) Status of Claims

The Examiner has withdrawn the rejection of claims 11-15 under 35 U.S.C. § 112, first paragraph. Claims 11-15 are now allowed and no longer at issue on appeal.

The rejection of claim 10 under 35 U.S.C. § 102(b) in view of Nicholson et al. (U.S. Patent No. 5,713,979) is the only remaining issue on appeal.

(4) Status of Amendments After Final

The Amendment dated July 3, 2003 amending claim 11 has not been entered. *See* Examiner's Answer at page 2. However, in view of the Examiner's allowance of claims 11-15 in their current form, entry of this Amendment is no longer requested by the Appellant.

(5) Summary Of Invention

Appellant disagrees with the Examiner's characterization of the invention regarding the correspondence between the recited "inlet" in claim 10 and the hole in seal support 18A, and the recited "first seal" and the stage 1 of airlock seal 17A.¹ *See* Examiner's Answer at page 3. With reference to Appellant's Fig. 2, the inlet need not necessarily read on the hole in seal support 18A, but could alternatively read on the hole of seal support 18B. Likewise, the recited "first seal" could alternatively read on airlock seal 17B.

The Examiner's statement that "[t]he only point of contention regarding claim interpretation being the preamble usage of 'for inserting a preform,'" raises the issue of claim

¹ Appellant believes the Examiner made a typographical error in making reference to "7A" as opposed to "17A".

interpretation of the preamble for the first time. *See Id.* Nevertheless, Appellant addresses this issue in the discussion of the Grounds of Rejection below.

(10) Grounds Of Rejection

In his Answer, the Examiner maintains that the disclosure that is relied upon in Nicholson et al. to reject claim 10 is that portion of the heat treatment facility illustrated in Fig. 1 from the furnace “B” and above. This partition of the heat treatment facility is artificial and cannot reasonably be characterized as an inlet to a furnace for drawing fiber.

The Examiner states that “[t]he mere fact that a given structure is integral does not preclude its consisting of various elements.” Examiner’s Answer at page 4 (quoting *Nerwin v. Erlichman*, 168 U.S.P.Q. 177, 179 (Bd. Pat. Int. 1969)). Appellant does not disagree with this general holding, but submits that it does not license the Examiner to parse a disclosed structure into separate parts and then give an *artificial* characterization of each part in order to argue that the part meets a limitation of a claim. Yet this is what the Examiner has done in rejecting claim 10. Indeed, the Examiner’s position that the portion of the furnace assembly of Nicholson et al. from the vacuum feed-through 8 to the outlet of furnace “B” constitutes the claimed inlet arrangement is entirely unreasonable. This portion of the furnace assembly, *which includes two furnaces (“A” and “B”)*, would not have been understood by one skilled in the art as an “inlet arrangement” for a fiber drawing furnace. In fact, the Examiner’s characterizations of portions of the heat treatment facility in Nicholson et al. is so strained that the Examiner is forced to concede the absence of important claimed features and resort to obvious-type arguments, under the guise of a 35 U.S.C. §102 anticipation rejection, to make a case for the rejection of claim 10.

Moreover, the Examiner incorrectly states what “is” and “is not” disputed by Appellant (*see, e.g.*, Examiner’s Answer at page 5-6). In fact, given the Examiner’s strained characterization of the disclosure in Nicholson et al., practically every limitation is in dispute as discussed below.

The Examiner acknowledges that “[t]he claimed arrangement is for inserting a preform into a furnace for drawing a fiber.” Examiner’s Answer at page 5. The Examiner then points to the vacuum feed-through 8 at the top of the furnace assembly (*see* Fig. 1 of Nicholson et al.) and characterizes this element as the recited “inlet.”

Contrary to the Examiner’s characterization, the vacuum feed-through 8 shown in Fig. 1 of Nicholson et al. is ***not an inlet*** for inserting a preform into either furnaces “A” or “B.” To characterize it as such is contrary to the actual disclosure, which states:

The upper end of furnace A is sealed (e.g. via a water-cooled metal flange 5 and a water-cooled metal dome 6), through which projects a water-cooled metal shaft 7. This shaft enters via a vacuum feed-through 8, which permits vertical movements of the shaft up and down and rotation about a vertical axis in either direction.

Nicholson et al. at column 8, lines 7-12. On the other hand, Nicholson et al. discloses a heat treatment facility with a ***common*** opening to furnace “A” ***that functions as both an inlet and an outlet***. Note the following disclosure in connection with Figs. 2-4:

The upper furnace A may be moved by a swinging arm, carriage, hoist, crane or other means to one or more different sites

within a building, three of these sites being shown in FIGS. 2, 3 and 4. Thus furnace A may be loaded at site I (FIG. 2), vertically over a deposition furnace shown in chain lines 28, moved to site II (FIG. 3), where it may be attached to a second furnace B and a chamber C, and after completion of the heat-treatment process in furnace B the furnace A may be moved to an unloading site III (shown in FIG. 4).

Nicholson et al. at column 7, lines 53-62. The foregoing disclosure and related figures make clear that the portion of the furnace assembly relied upon by the Examiner to reject claim 10 does not include an inlet at the vacuum feed-through 8, let alone an inlet with a separate outlet downstream of the inlet as required by claim 10.

Consequently, the furnace assembly cannot include “a first conveying path” extending from the inlet to the outlet as also required by claim 10. The Examiner contends that “[t]he claims do not limit the size of the ‘inlet’ so as to not read on preforms of narrow diameter.” Examiner’s Answer at page 5. Regardless of the diameter of the preform, it is clear that the vacuum feed-through is *not* an inlet for introducing a preform into furnace “A.” Rather, the vacuum feed-through is specifically structured to provide sliding support of the metal shaft 7. The Examiner’s reading of the disclosure of Nicholson et al. is completely removed from its contextual setting and cannot reasonably be relied upon as an actual teaching of the reference.

With respect to the recited “injector,” the Examiner acknowledges that the Fig. 1 of Nicholson et al. fails to show or describe an injector “between the closure member and the

outlet.” *See* Examiner’s Answer at page 5. However, citing column 8, lines 66-67 of Nicholson et al., the Examiner argues that the *text* of the reference provides for this feature. *Id.* The Examiner’s reasoning here is convoluted and flawed.

The text relied upon by the Examiner is as follows:

Means may be provided to introduce inert and/or process gas into furnace B, and/or to chamber C, or alternatively to connect these components to the vacuum system. ***These possibilities are represented schematically in FIG. 1 by a single inlet/exit pipe 25, fitted with a valve 26, but alternative pipework arrangements, not shown, are clearly possible.*** Appropriate water-cooling of chamber C is provided, for example by a cooling pipe 27.

Nicholson et al. at column 8, line 66 to column 9, line 6 (emphasis added). Appellant argued in the Appeal Brief that the foregoing disclosure does not provide any teaching or suggestion to include such an inlet/exit pipe *as part of an inlet arrangement*, which the Examiner alleges to be everything upstream of metal flange 21. Appellant and the Examiner are in agreement that Nicholson et al. provides that “alternative pipework arrangements, not shown, are clearly possible,” but Appellant maintains that this disclosure gives absolutely ***no guidance where and how to include the alternative arrangement, and is, therefore, no more than an unguided invitation to experiment.***

In responding to Appellant’s position (while maintaining the rejection under 35 U.S.C. § 102(b)), the Examiner argues that the language “and/or” in the above quotation suggests that

means may be provided to introduce inert and/or process gas directly into furnace B. Even if one assumes this to be the case, for the sake of argument alone, the reference does not disclose where to locate such a pipe to supply furnace “B” with an inert or process gas. Mindful of this deficiency, the Examiner states:

One would immediately envisage having a feed pipe which feeds directly into B. Note, col. 9, line 4 indicates that it would be clear to one of ordinary skill that different arrangements would be possible. To examiner, this is evidence that one of ordinary skill that would at once envisage “alternative pipework arrangements.”

To feed gas into a chamber, it can only come from the top, the bottom or a side. A pipe can’t come in from Nic[h]olson’s top or the bottom, therefore it must come in from the side: if the pipe came in the top or bottom, it would make the apparatus inoperable for its intended use. And any side location would be “between the closure member and the outlet” as required by the claim.

Examiner’s Answer at page 6.

Therefore, even under the Examiner’s hypothetical in which gas is fed directly to furnace “B,” the Examiner acknowledges that the gas may be fed at any one of a variety of locations. The Examiner then narrows the possibilities to just one location based, not on any actual teaching in the reference itself, but on the Examiner’s abstract reasoning. The Examiner argues that feeding gas into the chamber from the top or the bottom “would make the apparatus

inoperable for its intended use.” Examiner Answer at page 6. Adopting the Examiner’s “envisaging” rationale, one could “envisage” numerous arrangements, including one in which gas is fed from the alleged “outlet” of furnace “B,” similar to the arrangement in which gas is fed from the bottom of chamber “C.” The problem remains that none of these “envisaged” arrangements are actually disclosed in the prior art explicitly, inherently, or even impliedly. Therefore, Nicholson et al. cannot be relied upon to anticipate the invention recited in claim 10.

(11) Response to Arguments

In responding to Appellant’s position set forth in the Appeal Brief, the Examiner again acknowledges that the rejection of claim 10 is not based on a “concrete/specific embodiment of Nicholson’s figure 1” but on an embodiment that one skilled in the art would allegedly “envisage.” See Examiner’s Answer at page 7. The Examiner adds that feeding gas from the top or the bottom of furnace “B” would allegedly make the furnace assembly of Nicholson et al. inoperable, because the preform would not be able to pass through. *Id.* Again, adopting the Examiner’s “envisaging” rationale, one could “envisage” an injector placed at the outlet radially offset to be within the peripheral space between the preform and the inner wall of chamber “C.” Alternatively, one could envisage an injector that is removable to allow passage of the perform when required. Again, however, none of these “envisaged” hypothetical examples, including those espoused by the Examiner, are disclosed in the prior art.

In the paragraph bridging pages 7 and 8 of the Examiner’s Answer, the Examiner argues that, while it is true “that the ‘clearly possible’ language does not give guidance how/where to include the alternative arrangement,” one can rely on the statement in Nicholson et al. that the

alternatives are “clear” to one of ordinary skill in the art. The Examiner then cites case law relating to the sufficiency of a disclosures under the written description requirement of 35 U.S.C. § 112.

Appellant submits that it is improper for the Examiner to rely on the written description requirement for U.S. patents as evidence of what is actually taught in the prior art. Moreover, while the Examiner may take official notice of facts *outside of the record* for features that the Examiner alleges are so well-known by those skilled in the art, the Appellant must be permitted to seasonably challenge this assertion as provided for in the Manual of Patent Examining Procedure Section 2144.03.

Appellant submitted in the Appeal Brief that to the extent Nicholson et al. discloses the single inlet/exit pipe 25, fitted with a valve 26, at the *end* of chamber C so as not to interrupt the insulation and uniformity of this chamber, one skilled in the art would likely be motivated to maintain this arrangement or a substantially similar arrangement. The Examiner responds that teaching away is only relevant when arguing an obviousness-type rejection. *See* Examiner’s Answer at page 8. Appellant does not disagree. However, as explained above, the Examiner’s rejection *in substance* is an obviousness-type rejection. Thus, Appellant’s position is relevant.

Appellant also submitted that the present invention as recited in claim 10 is for “*drawing* a fiber,” whereas Nicholson et al. deals mainly with *sintering* a preform (*see* abstract and column 10, line 20, and titles of examples 1 to 4). The Examiner asserts that there is no indication as to why Nicholson’s arrangement can’t be used to draw fibers. Appellant respectfully disagrees. In

fact, none of the embodiments disclose furnaces that have openings from which a drawn fiber could exit.

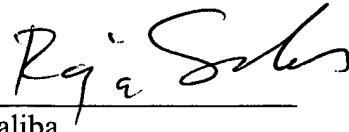
The Examiner responds that “claim 10 does not require any structure for drawing a fiber. Rather, the preamble states that the apparatus is “for inserting a preform into a furnace.”” Examiner’s Answer at page 9. In fact, as the Examiner acknowledges at the top of page 5 of his Answer, the preamble states: “An inlet arrangement for inserting a preform into a furnace *for drawing fiber* . . .” The Examiner should not be allowed to ignore this aspect of the claim. Indeed, in *Broehringer Ingelheim Vemedica, Inc. V. Schering-Plough Corp.*, 320 F.3d 1339, 1343 (Fed. Cir. 2003), the preamble recited a “method of growing and isolating [certain] virus.” The Federal Circuit rejected an argument that this language only provided a “context in which the invention operates.” *Id.* at 1345. Rather, the court held that this language provided a “raison d’etre” for the claim.

Moreover, the Examiner states “[t]here is no indication why Nicholson’s A and B (i.e. sans C) could not be used in conjunction with a fiber drawing furnace.” Examiner’s Answer at page 9. In fact, there is ample reason. As Appellant have noted above, the Examiner’s rejection is based on the unreasonable characterization that the portion of the furnace assembly of Nicholson et al. from the vacuum feed-through 8 to the outlet of furnace “B” constitutes the claimed inlet arrangement. This portion of the furnace assembly *includes two furnaces (“A” and “B”)*. One skilled in the art would certainly not use the Examiner’s arrangement that has two furnaces as an inlet to a separate fiber drawing furnace.

CONCLUSION

For the above reasons as well as the reasons set forth in Appellant's Brief on Appeal, Appellant respectfully requests that the Board reverse the Examiner's rejection of claim 10. An early and favorable decision on the merits of this Appeal is respectfully requested.

Respectfully submitted,



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